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EXAMINER
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ART UNIT	PAPER NUMBER
2722	8

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

☒ Responsive to communication(s) filed on *Apr 29, 1999*

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire ____*3*____ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-30* _____ is/are pending in the application.

Of the above, claim(s) *1-3, 7-12, and 17-22* _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *4-6, 13, 23, and 27-30* _____ is/are rejected.

☒ Claim(s) *14-16 and 24-26* _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on ___*Apr 29, 1999*___ is ☒approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

DETAILED ACTION

Response to Amendment

1.   Applicant's amendment was received on 4/29/99, and has been entered and made of record. Currently, claims 1 through 30 are pending, with claims 1 through 3, 7 through 12, and 17 through 22 presently being not under consideration as being directed to a non-elected invention.

Response to Election with Traverse

2.   Applicant's election with traverse of claims 4 through 6, 13 through 16, and 23 through 26 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the subcombination is not shown to be part of the combination (from page 12), and that no serious burden would be required to search both groups (page 13).

3.   Presently, a restriction to one of the following inventions is required under 35 U.S.C. 121:

> I.   Claims 1 through 3, 7 through 12, and 17 through 22 are drawn to a display control unit, classified in class 358, subclass 468.

> II.   Claims 4 through 6, 13 through 16, and 23 through 30 are drawn to a print prevention control unit, classified in class 395, subclass 113.

4.   The applicant's argument, stating that there is no showing of a subcombination (Group II) being part of a combination (Group I), is found to be correct, and the restriction is withdrawn on

those grounds. However, a new ground of restriction follows, as the inventions are distinct, each from the other because of the following reasons:

5.   Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In the instant case, invention I has separate utility, such as displaying the operable mode of operation on a display, thus allowing an operator to view the current mode of an image processing device, while invention II has separate utility such as prohibiting selection of an inoperable mode of operation through an operation panel, thus preventing an error occurance by not allowing an inoperable mode to be selected by an operator. See MPEP § 806.05(d).

6.   Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Response to Arguments

7.   Applicant's arguments with respect to claims 4 through 6, 13, and 23 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

8.   The proposed drawing correction and/or the proposed substitute sheets of drawings, filed

on 4/29/99 have been approved.

Claim Rejections - 35 USC § 102

9.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United
States before the invention thereof by the applicant for patent, or on an international application by another who
has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
thereof by the applicant for patent.

10.   **Claims 4 through 6, and 13** are rejected under 35 U.S.C. 102(e) as being anticipated by

Ueda *et al.* (U.S. Patent Number 5,715,497).

Regarding **claim 4**, Ueda discloses an image processing device operable in a plurality of

modes of operation (double-sided document mode, step mode, etc. along with normal mode,

mixed paper mode, and thin paper mode), comprising a memory (input page memory 103a) for

storing image data of a plurality of frames (column 10, lines 45 through 50, and column 15, lines

37 through 39), a controller (control system, column 11, lines 55 through 63) for determining a

state of the image data for each frame (document size detection, column 16, lines 35 through 37),

an operation panel (see Fig. 2) for selecting any of the plurality of modes of operation (column 7,

lines 38 through 63), and a controller (control system, shown in Figs. 18 and 34, performing step

13 "document transport processing" of Fig. 16) for automatically prohibiting selecting an

inoperable mode (normal mode) of operation of the plurality of modes of operation through the

operation panel based on the thus determined state of the image data (column 13, lines 6 through

23, and column 16, lines 38 through 63, wherein the normal mode is prohibited from being

selected if the document is positioned vertically in Fig. 18, and if the document is smaller than A4

size in Fig. 34).

Regarding **claim 5**, Ueda discloses the image processing device discussed in claim 4, and

further teaches of the decision controller determines a length of a frame of the image data in a

predetermined direction (column 10, lines 51 through 61, and column 11, lines 46 through 54, and

column 13, lines 48 through 53).

Regarding **claim 6**, Ueda discloses the image processing device discussed in claim 4, and

further teaches of the decision controller determines a frame size of the image data (column 11,

lines 28 through 54, and column 13, lines 38 through 53).

Regarding **claim 13**, Ueda discloses an image forming apparatus operable in a plurality of

print modes (double-sided document mode, step mode, etc. along with normal mode, mixed paper

mode, and thin paper mode), comprising a memory (input page memory 103a) for storing image

data of a plurality of frames (column 10, lines 45 through 50, and column 15, lines 37 through

39), a printer (printer P) for reading the image data stored in the memory for each frame and for

printing (column 4, line 62 through column 5, line 3), a controller (control system, column 11,

lines 55 through 63) for determining a state of the image data stored in the memory (document

size detection, column 10, lines 51 through 67, and column 16, lines 35 through 37), an operation

panel (see Fig. 2) for selecting any of the plurality of print modes (column 7, lines 38 through 63),

and a controller (control system, shown in Figs. 18 and 34, performing step 13 "document

transport processing" of Fig. 16) for automatically prohibiting selecting an inoperable mode

(normal mode) of operation of the plurality of modes of operation through the operation panel

based on the thus determined state of the image data (column 13, lines 6 through 23, and column

16, lines 38 through 63, wherein the normal mode is prohibited from being selected if the

document is positioned vertically in Fig. 18, and if the document is smaller than A4 size in Fig.

34).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. **Claims 4, 13, and 27 through 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishimori *et al.* (U.S. Patent Number 5,041,874) in view of Telle (U.S. Patent Number 5,555,099).

Regarding **claim 4**, Nishimori discloses an image processing device operable in a plurality of modes of operation (see Figs. 31A and 31B), comprising a controller (microprocessor 706 performing subroutine program Q07) for determining a state (document size) of the image data for each sheet (column 65, lines 14 through 25, and column 71, lines 29 through 45), an operation panel (shown in Figs. 18 through 20) for selecting any of the plurality of modes of operation (column 46 through column 49), and a controller (microprocessor 702 performing subroutine program A12) for automatically prohibiting selecting an inoperable mode (finishing mode) of operation of the plurality of modes of operation through the operation panel based on the thus determined state (detected sheet size) of the image data (column 59, lines 17 through 50). However, Nishimori fails to teach of a memory for storing image data of a plurality of frames, and consequently, determining the state of the image data stored in the memory for each frame. Telle

discloses an image processing device comprising a memory (job image buffer) for storing image data of a plurality of frames (column 4, lines 10 through 23), an operation panel (shown in Figs. 5A and 5B) for selecting any of a plurality of modes of operation (column 3, line 67 through column 4, line 6), and a controller (microcontroller) for automatically prohibiting selecting an inoperable mode of operation of the plurality of modes of operation through the operation panel (column 8, lines 45 through 60). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include Telle's teachings within Nishimori's system, thereby including a memory for storing image data of a plurality of frames. Nishimori's system could easily include a memory to store a plurality of frames, as recognized by Telle, and thus would be modernized, as including a memory in a copying device to store scanned image data of a plurality of frames is widely used and known in the art.

Regarding **claim 13**, Nishimori discloses an image forming apparatus operable in a plurality of print modes (see Figs. 31A and 31B), comprising a printer for printing read image data (column 7, lines 49 through 61), a controller (microprocessor 706 performing subroutine program Q07) for determining a state (document size) of the image data for each sheet (column 65, lines 14 through 25, and column 71, lines 29 through 45), an operation panel (shown in Figs. 18 through 20) for selecting any of the plurality of print modes (column 46 through column 49), and a controller (microprocessor 702 performing subroutine program A12) for automatically prohibiting selecting an inoperable print mode (finishing mode) of the plurality of print modes through the operation panel based on the thus determined state (detected sheet size) of the image

data (column 59, lines 17 through 50). However, Nishimori fails to teach of a memory for storing

image data of a plurality of frames, and consequently, determining the state of the image data

stored in the memory for each frame. Telle discloses an image processing device comprising a

memory (job image buffer) for storing image data of a plurality of frames (column 4, lines 10

through 23), an operation panel (shown in Figs. 5A and 5B) for selecting any of a plurality of

modes of operation (column 3, line 67 through column 4, line 6), and a controller

(microcontroller) for automatically prohibiting selecting an inoperable mode of operation of the

plurality of modes of operation through the operation panel (column 8, lines 45 through 60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to include Telle's teachings within Nishimori's system, thereby including a

memory for storing image data of a plurality of frames. Nishimori's system could easily include a

memory to store a plurality of frames, as recognized by Telle, and thus would be modernized, as

including a memory in a copying device to store scanned image data of a plurality of frames is

widely used and known in the art.

Regarding **claim 27**, Nishimori and Telle disclose the image processing device discussed

in claim 4 above, and Nishimori further teaches of a display for displaying an operating state of

the image processing device (see Fig. 20), and a controller (microprocessor 702), responsive to

the selection prohibiting controller, for displaying on the display an operable mode of operation of

the plurality of modes operation (see Fig. 32, step K03, which glimmers lamps 680a or 680b,

column 59, lines 36 through 43).

Regarding **claim 28**, Nishimori discloses an image processing device operable in a

plurality of modes of operation (see Figs. 31A and 31B), comprising a controller (microprocessor

706 performing subroutine program Q07) for determining a state (document size) of the image

data for each sheet (column 65, lines 14 through 25, and column 71, lines 29 through 45), a

controller (microprocessor 702 performing subroutine program A12) for automatically prohibiting

selecting an inoperable mode (finishing mode) of operation of the plurality of modes of operation

through the operation panel based on the thus determined state (detected sheet size) of the image

data (column 59, lines 17 through 50), and an operation panel (see Fig. 20), responsive to the

selection prohibiting controller, for selecting any of the plurality of modes of operation, wherein

the operation panel automatically prohibiting selecting the thus determined inoperable mode of

operation (see Fig. 32, step K03, which glimmers lamps 680a or 680b, column 59, lines 36

through 43). However, Nishimori fails to teach of a memory for storing image data of a plurality

of frames, and consequently, determining the state of the image data stored in the memory for

each frame. Telle discloses an image processing device comprising a memory (job image buffer)

for storing image data of a plurality of frames (column 4, lines 10 through 23), an operation panel

(shown in Figs. 5A and 5B) for selecting any of a plurality of modes of operation (column 3, line

67 through column 4, line 6), and a controller (microcontroller) for automatically prohibiting

selecting an inoperable mode of operation of the plurality of modes of operation through the

operation panel (column 8, lines 45 through 60). Therefore, it would have been obvious to a

person of ordinary skill in the art at the time the invention was made to include Telle's teachings

within Nishimori's system, thereby including a memory for storing image data of a plurality of

frames. Nishimori's system could easily include a memory to store a plurality of frames, as

recognized by Telle, and thus would be modernized, as including a memory in a copying device to

store scanned image data of a plurality of frames is widely used and known in the art.

Regarding **claim 29**, Nishimori and Telle disclose the image processing device discussed

in claim 28 above, and Nishimori further teaches of the state of the image data determined by the

state decision controller for each frame thereof is a frame size (column 59, lines 32 through 36).

Regarding **claim 30**, Nishimori and Telle disclose the image processing device discussed

in claim 29 above, and Nishimori further teaches of the plurality of modes of operation include at

least one of economy print mode, two-side print mode (column 48, lines 66 and 67), and staple

print mode (column 49, lines 41 through 44).

13.   **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Collard *et al.*

(U.S. Patent Number 5,825,988) in view of Ueda *et al.* (U.S. Patent Number 5,715,497).

Regarding **claim 23**, Collard discloses an image forming apparatus operable in a plurality

of print modes (see Figs. 6A and 6B, digital, 2-sided, and 1-sided modes), comprising a memory

(central storage means 15, or memory disc 23) for storing a plurality of print jobs (column 5, lines

9 through 61), each print job containing image data of at least one frame (column 5, lines 27

through 29), a selector for selecting one of the plurality of print jobs stored in the memory

(column 7, lines 18 through 27), a controller (control module 18) for determining a state of the

image data contained in the print job selected by the print-job selector (column 7, lines 28 through

37), a printer (printing unit 3) for printing the image data contained in the print job selected by the

print-job selector (column 4, lines 15 through 60), and an operation panel (panel 19) for selecting

any of the plurality of print modes (column 6, lines 10 through 65), and a controller (control unit

18) for selecting a print mode of the plurality of print modes through the operation panel based on

the thus determined state of the image data contained in the print job selected by the print-job

selector (column 4, line 61 through column 5, line 8, and column 7, lines 33 through 63).

However, Collard fails to teach of the controller automatically prohibiting selecting an inoperable

print mode based on the thus determined state or the selected print job. Ueda discloses an image

forming apparatus operable in a plurality of print modes (double-sided document mode, step

mode, etc. along with normal mode, mixed paper mode, and thin paper mode)which utilizes a

memory (input page memory 103a) for storing image data of a plurality of frames (column 10,

lines 45 through 50, and column 15, lines 37 through 39), a controller (control system, column

11, lines 55 through 63) for determining a state of the image data stored in the memory

(document size detection, column 10, lines 51 through 67, and column 16, lines 35 through 37),

and a controller (control system, shown in Figs. 18 and 34, performing step 13 "document

transport processing" of Fig. 16) for automatically prohibiting selecting an inoperable print mode

(normal mode) of operation of the plurality of modes of operation through the operation panel

based on the thus determined state of the image data (column 13, lines 6 through 23, and column

16, lines 38 through 63, wherein the normal mode is prohibited from being selected if the

document is positioned vertically in Fig. 18, and if the document is smaller than A4 size in Fig. 34). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include Ueda's teachings within Collard's system. Collard's system could easily be modified to include Ueda's teachings since both systems share cumulative features.

Allowable Subject Matter

14.   **Claims 14 through 16, and 24 through 26** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Citation of Pertinent Prior Art

15.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Nishimori *et al.* (U.S. Patent Number 5,697,039) discloses a copying apparatus which inhibits selecting an inoperable binding mode when a two-original feeding mode is operating;

Kato *et al.* (U.S. Patent Number 5,543,907) discloses a copying apparatus which can prohibit the sorting process depending on a determined state of the original being one or not;

Kawai (U.S. Patent Number 5,270,779) discloses an apparatus which prohibits selection of an inoperable operation mode;

Ishiguro *et al.* (U.S. Patent Number 4,864,350) discloses a copying apparatus having controls for inhibiting the operation of a binding unit when the size of a sheet does not conform to the allowable size.

Conclusion

16.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles, can be reached on (703) 305-4712. The fax phone number for this Group is (703) 308-6606.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800/4700.

Joseph R. Pokrzywa

July 26, 1999

EDWARD L. COLES
SUPERVISORY PATENT EXAMINER
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